**% Name : Mokshada Pravin Toke**

**% Roll no : 72**

**n=input('\nEnter The value of given points n:');**

**for i=1:n**

**ar2(i)=input('\nEnter the value of x:');**

**ar1(i)=input('\nEnter the value of y:');**

**end**

**sum0=0;**

**sum1=0;**

**sum2=0;**

**sum3=0;**

**for i=1:n**

**sum0=sum0+ar2(i);**

**sum1=sum1+ar1(i);**

**sum2=sum2+ar2(i)\*ar1(i);**

**sum3=sum3+ar2(i)\*ar2(i);**

**end**

**ds=sum0\*sum0-n\*sum3;**

**da=sum1\*sum0-n\*sum2;**

**db=sum0\*sum2-sum1\*sum3;**

**a=da/ds;**

**b=db/ds;**

**fprintf('a=%f',a);**

**fprintf('b=%f',b);**

**fprintf('y=%fx+%f',a,b);**

**OUTPUT**

**Enter The value of given points n:7**

**Enter the value of x:1**

**Enter the value of y:0.5**

**Enter the value of x:2**

**Enter the value of y:2.5**

**Enter the value of x:3**

**Enter the value of y:2**

**Enter the value of x:4**

**Enter the value of y:4**

**Enter the value of x:5**

**Enter the value of y:3.5**

**Enter the value of x:6**

**Enter the value of y:6**

**Enter the value of x:7**

**a=0.839286**

**b=0.071429y=0.839286x+0.071429**